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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,155	06/30/2005	Hajime Okutsu	273948US0PCT	7811

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EXAMINER	
PIERY, MICHAEL T	
ART UNIT	PAPER NUMBER
1791	

NOTIFICATION DATE	DELIVERY MODE
11/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/541,155	OKUTSU ET AL.	
	Examiner	Art Unit	
	MICHAEL T. PIERY	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ida (US 4,839,125) in view of Nishi (JP 06-278148 - citations refer to attached machine translation).

Regarding claim 6, Ida teaches producing a plate polymer from a polymerizable material containing methyl methacrylate (column 2, lines 15-17), using an apparatus having two endless

belts, continuous gaskets, a heating zone for solidifying the polymerizable material with a D/X ratio between 0.30 and 0.99 (column 6, lines 21-45). Ida teaches the rollers are spaced by 200 mm and the diameters are 90 mm so the distance between the axes (X) is either 200 or 290 (2 radii plus the distance between), either of which place D/X in the claimed range. Ida teaches the width of the belt is 800 mm and the diameter of the rolls is 90 mm (column 6, lines 22 and 32). The examiner interprets the width of the roll body portion is not substantially greater than the width of the belt, therefore the D/Z ratio is greater than 0.04. Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the desired width of the roll body portion because the roll body width needs to be optimized to be at least as wide as the belt but not too wide to incur unnecessary material costs. It has been held that optimization of a working variable is within routine skill of one in the art. Ida does not explicitly teach a laser beam emitter. Nishi, however, teaches monitoring and regulating dimensions in a plate/board production process using a laser emitting device (paragraph 0020). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Ida to include a laser monitoring device because the device provides automated adjustments to the process based on detected variations from ideal dimensions (paragraph 0020).

Regarding claim 7, Ida teaches producing a plate polymer from a polymerizable material containing methyl methacrylate (column 2, lines 15-17), using an apparatus having two endless belts, continuous gaskets, a heating zone for solidifying the polymerizable material with a D/X ratio between 0.30 and 0.99 (column 6, lines 21-45). Ida teaches the rollers are spaced by 200 mm and the diameters are 90 mm so the distance between the axes (X) is either 200 or 290 (2 radii plus the distance between), either of which place D/X in the claimed range. Ida teaches the

width of the belt is 800 mm and the diameter of the rolls is 90 mm (column 6, lines 22 and 32). The examiner interprets the width of the roll body portion is not substantially greater than the width of the belt, therefore the D/Z ratio is greater than 0.04. Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the desired width of the roll body portion because the roll body width needs to be optimized to be at least as wide as the belt but not too wide to incur unnecessary material costs. It has been held that optimization of a working variable is within routine skill of one in the art. Ida teaches the employing gaskets at both sides of the endless belt to regulate the spreading of the raw material (column 5, lines 13-16) but does not explicitly teach detecting the position of the raw material. Nishi, however, teaches it is known to detect the height of the raw material and adjust the feeding and shaping means accordingly (paragraph 0021). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply this teaching (detecting and adjusting) to the width of the material because, similar to the height dimension, it is desirable that the width dimension is constant. In other words, it would have been obvious to use the height dimension control means to control the width dimension.

Regarding claim 8, Ida does not explicitly teach a laser beam emitter the sides of the belt and reflecting the laser to regulate the variation width. However, Nishi teaches monitoring and regulating dimensions in a plate/board production process using a laser emitting device (paragraph 0020). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Ida to include a laser monitoring device because the device provides automated adjustments to the process based on detected variations from ideal dimensions (paragraph 0020).

Response to Arguments

Applicant's arguments filed July 6, 2009 have been fully considered but they are not persuasive.

Applicant argues that Ida does not teach the claimed variation width. Ida teaches gaskets that control the variation width, as discussed above.

Applicant argues that the positioning of the laser emitter and detector in Nishi cannot be applied to the claimed invention. Nishi is relied upon to show that laser detection is known in the continuous belt molding art. Correct placement of the emitter and detector would be determined on a case specific basis. Further, it has been held that rearrangement of parts is within routine skill of one in the art (MPEP 2144.04).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. PIERY whose telephone number is (571)270-5047. The examiner can normally be reached on M-Th 8:30-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael T Piery/
Examiner, Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791